

**MAINE FARMER**

Our Home, our Country, and our Brother Man.

COMMENCEMENT OF VOLUME XXV.

Last week we made a closing bow to those who leave us at the end of Vol. XXV. We now make our obsequies to our old friends who remain with us, and to the new ones who come to aid and assist us through the coming year. We greet you, one and all, as fellow-laborers in a great cause, and fellow-soldiers in a good fight—the cause of industrial improvement in all departments of practical life—and the fight with sloth, ignorance, and prejudice. Much has been done, but much more remains to be done. Those who have been longest in this work, can look back and see that the world has moved, and does move, though rather slowly; and looking forward, see cause for increasing exertion, and that hope that gives courage, even in the darkest hour. Individuals, alone, are comparatively weak; but individuals united, are strong and efficient. A single bee, though it may start with the sun and work till dark, cannot seem to effect much; but when united with the swarm, finds its labors combining with that of others, and their united efforts soon giving form and accumulated weight to the hive. All are thus made to rejoice in the warmth, and health and activity imparted each to each, and in the associated strength and comforts resulting to the community thus formed and sustained.

So it is in the great human hive, or hives, of this world. Union of strength, union of labors, union of hands, and of minds, support and sustain and reflect a thousand comforts and blessings unattainable by the same individuals laboring separately and isolated from each other. That union is strength, and well directed strength is the grand agent for the consummation of the greatest amount of earthly prosperity and happiness, and the highest elevation of intellectual and spiritual development, is evident, wherever and whichever way we look. It is so written in the Book of Life—mortal and immortal life—and those are wise who obey its behests.

We all have our particular spheres of action; but these spheres, when blessed and properly harmonized with each other, form the grand circle of action so necessary to perfect accomplishment of the uses which pertain to us, and which it is our duty to perform. Such are our views in regard to the duties devolving upon each and every one of us. Hence, while endeavoring to do what we can to raise up and elevate the Agricultural and productive industry and talent of the country, we earnestly call upon our "fellow man" to aid and assist us in such manner as he best can. We can do but little alone. The setting of types—the printing the paper—the sending it broadcast, as it were, over the country—necessary as it may be, is nevertheless but a small part of the business. It is but the machinery placed on the lowest plane of human action. To make this useful, there is need to call in the action of higher and more glorious faculties and attributes, and the exercise and application of mind as exhibited in all its strength of thought and reason. The first is the instrument, the engine, and the last is the engineer which directs and applies and brings it into practical uses. Material aid is necessary, but mental aid is still more necessary to bring forth the fruits—the great harvest—without the attainment of which the material aid is lost and useless.

The communication of your subscription is valuable, but the communication of your thoughts—the results of your observations and reasonings—is still more valuable. This last is the very essential, the very life and soul of the whole. To carry out therefore, and to consummate the design of the publication of the Farmer—a union of all who desire to aid in the improvement of the classes and interests in question, is necessary—absolutely necessary. Indeed, by the contribution of a little of your purse and a good deal of your brains, we may do much, and perhaps be all enabled to bring ourselves, thereby the community of which we are all component particles, up to the highest point of material prosperity and intellectual power.

THE CHINESE SUGAR CANE. Almost all of our agricultural exchanges have some report regarding the value of the Chinese sugar cane (*Sorghum saccharatum*). Experiments, in a small way, were tried with it in many different sections of the country, and the conclusions arrived at from these limited experiments, are that it bids fair to be a great acquisition to the farmer. A larger amount of seed will be planted next year, and more thorough and exact experiments instituted, and of course, more reliable knowledge obtained. Some are of opinion that the time for depending on the South, for molasses at least, has passed away, and that every farmer, who can grow the Chinese crop, can supply himself from his own farm at a cheap rate. This will be a desideratum, but we are not so sanguine as some. We want five years experience in the business before we can declare our independence in the matter. In the meantime we advise every farmer to try it on a moderate scale. Be sure and get the true seed. Knows not to hesitate to palm off upon you common broom corn seed, or any seed that looks like the true, for your money.

DRAINING. We publish in another column of this week's paper, an article upon underground draining, being a report made before the Bangor Horticultural Society, by a special committee. We commend it to the careful perusal of our readers, who will, many of them, be surprised to find that there is so great a difference in the condition and capabilities of the same piece of land drained or undrained. We are obliged to Col. Little, of Bangor, for calling our attention to this report. We should have given it place sooner, had it come under our notice.

LARGE YIELD. Daniel C. Auger, of Woodbridge, Conn., raised the past season, four bushels of California potatoes, from the seed of one potato. He planted but a single eye in a hill, making seventy-two hills.

DEATH OF "BLACK HAWK."

This superb and valuable animal, so justly celebrated throughout all "horsemanship," died at the stable of his owner, David Hill, Esq., of Bridgeport, Vt., on the 7th inst. He was a remarkable and valuable horse. The Spirit of the Times says—

Black Hawk was a little less than fifteen hands high, and weighed about 1000 pounds. His color was black, like that of his dam, and his coat was black, bay, or chestnut, with hardly an exception. He possessed the character of the Morgan family of horses in an eminent degree. He was symmetrical, muscular, and compact in his form, and his elastic style of action, speed, and endurance, which qualities he imparted in a remarkable degree to his progeny, rendered him one of the most valuable stock horses ever owned in this country. Black Hawk could trot his single mile in 2.40, and exhibited considerable bottom in longer races. In 1842 he won a match for \$1000, by trotting on the Cambridge Track five miles inside of sixteen minutes. Oct. 3, 1843, he won a race of two miles heats, beating two competitors easily in 5.43—5.48—5.47. Black Hawk was the sire of several of the fastest trotting horses on the turf, among them Ethan Allen, the best trotting stallion in the world; of Lanest, who has beaten the best time of Lady Suffolk, of Black Ralph, Belle of Saratoga, Black Hawk Maid, &c. He was not only a fortune for his owner, but the value of his stock has added much to the wealth of the State where he was kept. Mr. Hill has received for his services over forty thousand dollars; his last season netted seven thousand dollars. His owner obtained insurance on his life until he arrived at an age when the premium charged was necessarily very high and he died uninsured.

PROTECTION TO SHEEP IN WINTER. The Maine Farmer prints this article, which a few weeks since appeared as a leading editorial in the Prairie Farmer, and gives credit to the Louisville (Ky.) Commercial Review. How is this, Brother Holmes? [Prairie Farmer.]

Well, really, Brother Wright, if we knew, we had rather tell you than any body else. We always aim to father all our selections upon somebody, and if, in the hurry of life, some of the "foundlings" get laid at the wrong man's door, we hope the real parent will attribute the blunder to carelessness rather than to malice aforethought. Any snow on the prairies, brother Wright?

ERROR CORRECTED. In the report of the committee of the Ken. Co. Ag. Society on crops, which was published last week, it is stated that Mr. Watson raised on half an acre twenty-three bushels of barley. It should read twenty bushels. Had he raised twenty-three bushels, he would have come up to the amount of crop raised by Mr. Richardson, who raised forty-six bushels on an acre, or twenty-three on half an acre. By correcting this error, the decision of the committee will appear more plain and just.

SUGAR FROM BEETS.—QUERY.

MR. EDITOR.—I remember being, some years ago, present at the first North Arisotook cattle show and fair, when you delivered the address. Among the good things you mentioned was an article termed beet sugar, which you spoke of very highly, and to convince us of the fact, you introduced the article itself, which fully sustained the character already given. I think you told us it could be manufactured in France for about eight cents per pound. Now, what I want to know is, this is the reason we cannot manufacture our own sugar, in a country where we can raise as many beets on an acre as we can grow above and below, cheaper than to pay 10 to 20 cents per pound, the price it bears in this part of the country, at the present time. I can easily understand the means by which a neighborhood, by a sort of a cider mill operation, might wash the beet, obtain the juice and boil it, &c., but the process of clarifying and graining I do not understand.

I should like to have a history of the process of manufacturing the article, through your paper, and if it is a matter of fact that the operation is practicable, it seems to me, by fully understanding the matter, the farming part of the community might make it a lasting benefit to themselves. If you will give us any information in regard to this matter, you will much oblige a Farmer.

Maple Grove, Dec., 8, 1886.

NOTE. Beet sugar is still manufactured in France and parts of Germany. It has been manufactured by way of experiment some years ago in this country, but labor was too high and southern sugar at that time too cheap, to allow it to be done at a profit. There is no trouble in raising the beet, and in obtaining the juice. The chief trouble is in clarifying and preventing certain chemical changes from taking place during the operation. This part requires some experience. We will soon republish such directions as have been found the best in this business. [Ed.]

MAXIMS FOR FARMERS. A writer in the Boston Cultivator says:—"I would lay down the following rules, or maxims, which I think experience has demonstrated to be sound:—

For rich farms, stock with the stately Durhams; for poorer, the active Devons. The best point for a milker is a thin thigh. For speed in a horse, a muscular thigh. To kill caterpillars, rub them up with the ash. To kill lice on cattle, dust lightly with sand. To make the best hay, cut the grass early; when mowed by spreading, cook up for two or three days, then open and cart it. By curing hay in this way, it contains all the aroma and nutriment of grasses.

CHERRYBERRIES. Eliza Needham, Esq., of West Danvers, has a lot of vland, bordering upon the Danvers railroad, containing five-eighths of an acre. Upon this, some five or six years since, he set out cherry plants and has cultivated them with great care. This year he picked ninety-seven bushels of excellent cherries, which he sold for four dollars per bushel, and besides these there were some ten bushels of damaged berries. From trees on the same land he picked fourteen barrels of apples, which he sold for four dollars per barrel—making the gross income, from five-eighths of an acre, four hundred and forty-four dollars! Best this who can? [Salem Register.]

UNDERGROUND DRAINING.

A REPORT TO THE BANGOR HORTICULTURAL SOCIETY.

Your Committee, appointed at the Annual Meeting, to visit B. F. Nourse's farm in Orrington, to witness and report upon the effect of underground draining," now submit for your consideration the following statement from facts communicated by Mr. Nourse, and from knowledge obtained by personal inspection.

At the time of our visit in early summer, there was but one expression of satisfaction, not only from each individual member of the Committee, but from all the invited guests, at the appearance of the farm, the buildings, fences and crops. Although the season had been wet, yet the land was dry; the grass, grain, corn and trees were making a vigorous growth, being clothed with a richness of verdure which gave promise of abundant harvests. They all bore testimony to a careful, intelligent, scientific culture. Comparing this land with certain other portions of similar character in the vicinity, which had not received the same treatment, the contrast was very perceptible. The one was light, porous, arable and free from water; the other hard, lumpy, cohesive or miry. The one had been drained, the other drowed.

The whole farm lies upon the northerly inclination of a hill several hundred feet above tide water, and extends to the summit. The super soil is generally clay loam with some gravel; the latter is present in some places in sufficient quantity to constitute gravelly loam. Near the top of the hill, the loam rests directly upon a ledge of rock similar to that which crests the neighboring hills, and this ledge appears at the surface in a few spots of one or two rods extent each. When cleared and ploughed enough loose stones and boulders of granite were exposed on the surface to build the external walls. It might be called a "rocky" farm. With the exception of two places, each of about two acres, the farm was wet and "springy" unfit for ploughing or any other agricultural purpose until quite late in spring or early summer. Water is found everywhere quite near the surface. The deepest well on the premises, dug in the dry season of 1854, extends only thirteen feet. The excess of water made it cold and rather discouraging for any crop except grass, and even this was too readily killed by the action of winter frost. The surface soil is underlaid throughout (except immediately on the ledge of rock) by an impervious sub-soil or hard pan of stiff clay, quite retentive of water.

The first draining was done in 1852, on a piece of about 14 acres, designed for a pear orchard. Thirteen drains 15 rods in length, and 20 feet apart, were opened down the hill. The duct or channel was made by placing two flat stones on their edges and letting the upper edge fall together; these were wedged in place and filled above with six or eight inches of small cobble or broken stones. Inverted turfs or boughs were then spread upon them to prevent the washing of earthy matter into the drain, and the earth was returned over all. These drains empty by bending at an acute angle into a main drain which is at right angles with the general course of the former, following a more gentle inclination westward, and laid with flat stones resting upon side stone, covered and filled in as the others. The main discharge the water at the roadside, which has never ceased flowing from it during the coldest winter weather. The land was then ploughed across the drains with six oxen and the largest plough obtainable, opening a furrow twelve inches deep, in which followed a sub-soil plough drawn by four oxen, cutting twelve inches deeper.

Upon this piece of land the frost comes out some days earlier, is later in fall, and of less depth in winter than in contiguous land undrained. The whole is dry enough for spading or ploughing as soon as the frost is out in the spring, or within two hours after any heavy rain. During the drought of 1854 there was at all times sufficient dampness apparent on scraping the surface of the ground (with the foot in passing,) and a crop of beans was planted, grown and gathered therefrom, without so much rain as will usually fall in a shower of fifteen minutes duration, while vegetation in the next fields was parching for lack of moisture.

The cost of 209 rods of drain was \$216, or little over \$1 per rod, equal to \$140 per acre. This was the first attempt; those afterwards made were quite as effectual at much less expense.

In 1854 drains were laid 278 rods in length, costing \$250. This, however, includes an undue proportion of large and more costly drains for main lines needed to carry the surplus water a distance from the lands made dry, but available as main lines for future small drains. Yet this is an average of about 90 cents per rod 34 feet deep.

The small drains were laid with sole tile that cost \$24.50 per thousand delivered at the farm, (double the cost in Albany where manufactured,) and the main lines with flat stones resting on side stones, filled in and covered as before described, the earth being returned easily with a two-horse scraper. A field of one acre and two-fifths "thoroughly drained" in this way, 40 feet apart, 31 feet deep, required 105 rods, including main, and cost \$67.50 per acre completed. This field was ploughed and subsoiled each about ten inches deep, and a good crop taken off last season. During the heaviest rain no running or standing water could be seen on its surface. When your committee made its visit we were shown an acre of this field, which had been manured and partly ploughed for corn when a protracted rain came on. The seed being in soak and manure wasting, after the second day's rain, it was resolved to prosecute, the planting, and the ploughing was finished, the land harrowed, furrowed, dressed in the furrow, and planted in a drizzling rain, working easily and well. The corn all came up and has grown well; and still we did not see many clods or other appearances of wet weather working. Yet this was a clay loam, formerly as wet as the adjoining grass field, upon which oxen and cart could not pass on the day of this planting without cutting through the turf and "squirting" deeply. The nearest neighbor, a member of your committee, said "if he had planted that day it must have been from a raft!"

In 1855 provisions were so high that such labor as ditches rendered could not be cheapened in cost per rod; but an experiment was tried on a field of three acres by laying the drains 34 feet deep, 4 rods apart, leading into a stone main, all of them covered and filled as before. An acre required 45 rods—average cost 90 cents per rod, \$40.50 per acre. More time is needed with wet and dry seasons to test the efficiency of drains so far apart.

This field was ploughed but not subsoiled last fall. It was in good working order three days after the frost was out, two weeks earlier than the adjacent land was ready to plough. If not so thorough in laying the land dry and giving it such an open, porous soil as is desirable, its evident benefit at so small a cost per acre, makes the experiment worthy of imitation.

Appended are some statistics of the cost, as ascertained, in draining this farm. These, however, must vary with circumstances, such as convenience of material, presence or absence of rock in the cuts for drains, price of labor, &c. No allowance is made for the removal of the large stone piles that encumbered these fields with disagreeable frequency, though it might be reasonably estimated as worth one-fourth or one-third the cost of the drains to get rid of these unsightly objects, by burying them forever beneath reach of scythe, hoe or even plough.

Cost of stone drains:

MAINS.	Per rod.
Digging 4 ft. deep, 2 ft. wide at bottom	44 cts.
Hauling stone for channel	15
Laying same	12
Hauling and picking small stones for filling	12
Sods, boughs or moss	4
Returning earth with scraper	12
	\$1.00
SMALL DRAINS.	Per rod.
Digging 34 ft. deep, 20 in. at bottom	374 cts.
Hauling stone for channel	12
Laying same	10
Hauling and picking small stones for filling	12
Sods, boughs or moss	4
Returning earth with scraper	10
	86 cts.
Tile—2 inches calibre.	Per rod.
Digging 34 ft. deep, 6 in. at bottom	33 cts.
Laying same	3
Stone fitting	4
Sods, &c.	2
Refilling	6
	88 cts.

In conclusion we would represent that the current testimony of all, in this country and Europe, who have tried this system of draining, proves that the following benefits are obtained:

It obviates the bad effects of drought, because the roots of plants and trees can descend more deeply for nutriment and moisture; by removing excess of water, it renders soils earlier in spring, and allows work to be done sooner after rain; it averts the effects of cold weather later in autumn; it prevents the heaving of grass and grain in winter, and the frost from penetrating so deeply; it enables us to deepen the surface soil, it accelerates the disintegration of the mineral matters in the soil, and improves its mechanical condition by promoting the finer comminution of the earthy particles; hastens the decay of roots and other vegetable matter; it allows the fertilizing gases of the atmosphere and the water from rains to percolate deeply and be deposited among the absorbent parts of the soil until the necessities of plants require them; it causes a more even distribution of nutritious matters among those parts of soil traversed by roots; by removing stagnant water, it prevents the cooling process of evaporation, and the abstraction of heat; it contributes to the lower portions of the soil; it prevents meadows from becoming impoverished; it causes the poisonous excremental matter of plants to be carried out of the reach of their roots; it prevents the formation of acetic and other organic acids, which favor the production of sorrel and other noxious weeds, and it makes the surface soil of heavy lands light, and free from incrustation.

From the preceding facts, your committee are fully of the opinion, that this system of underground draining would be of great public utility, and we cannot too strongly recommend it to every Horticulturalist and Agriculturalist.

When these drains, with subsoil ploughing, shall be universally used, then will that desideratum be attained, "two spears of grain will grow instead of one;" then, emphatically, "the wilderness and the solitary place shall be glad for them; and the desert shall rejoice and blossom as the rose."

All of which is respectfully presented by
J. C. WESTON,
A. NOYES,
W. GOODALE,
ORIN FAYOR,
E. P. BALDWIN,
Committee.
Bangor, Sept. 12, 1886.

APPLE TREE HEDGES. It is said that apple trees make a hedge equal if not superior to any thing else, and by letting them grow pretty thick from the seed, they will grow scrappy and ugly enough to keep out anything. They would not probably need any more pruning than they would get from the cattle eating them off, unless the farmers improve from the way they are apt to treat their young orchards! The advantages over the hawthorn would be a much quicker growth, easier obtaining seeds, and quite as hardy and durable. The pomace itself could be sown without separating from the seeds when convenient. The Osage Orange will not stand our northern winters sufficiently to be a dependence, and if it did it would be no better. [Country Gentleman.]

FATTENING DUCKS. Ducklings intended for the table should be confined in a warm house, never to be allowed to swim, and have an unlimited supply of food. A mixture of three parts of Indian corn meal and one part potatoes, moistened slightly with the washings of dishes, the liquor in which meat has been boiled, or milk, with a few unground grains of barley once daily, fattens them quickly.

SO. KENNEBEC AG. SOCIETY.

REPORTS OF COMMITTEES.

ORNAMENTAL LEATHER WORK, &c.

Mrs. C. P. Branch, Gardiner, leather bracket, 25cts.; Mrs. H. S. Whitman, wax flowers and shells, 50cts.; Miss Anna Crawford, 10 years old, knit basket, 25cts.; Miss H. S. Whitman, Gardiner, 2 emb. collars, 50cts.; Miss M. T. Collins, Farmington, three crocheted collars, 50cts.; Mrs. F. Glazier, Jr., Hallowell, embroidery, 50cts.; Mrs. Abby L. Moore, Gardiner, crocheted work, 50cts.; Mrs. G. H. Robinson, Farmington, raised embroidery, \$1.00; Mrs. P. Pratt, Gardiner, crocheted, 75cts.; Miss Angeline Jenkins, West Gardiner, embroidered skirt, 50cts.; Mrs. S. G. Moore, Gard., embroidered work, 50cts.; Mrs. M. M. Homan, Augusta, embroidered slippers, &c., 50cts.; Mrs. George Warren, Farmington, worsted table cover, 75cts.; Miss A. M. Bartlett, Litchfield, toilet cushion, 25cts.; Miss M. Soper, Pittsford, lamp mat, 25cts.; Mrs. John Jewett, Pittsford, infant's skirt, 25cts.

EMBROIDERY, CROCHET WORK, &c.

Mrs. C. James, Dresden, lamp mat, 25cts.; Miss Susan Crawford, 10 years old, knit basket, 25cts.; Miss H. S. Whitman, Gardiner, 2 emb. collars, 50cts.; Miss M. T. Collins, Farmington, three crocheted collars, 50cts.; Mrs. F. Glazier, Jr., Hallowell, embroidery, 50cts.; Mrs. Abby L. Moore, Gardiner, crocheted work, 50cts.; Mrs. G. H. Robinson, Farmington, raised embroidery, \$1.00; Mrs. P. Pratt, Gardiner, crocheted, 75cts.; Miss Angeline Jenkins, West Gardiner, embroidered skirt, 50cts.; Mrs. S. G. Moore, Gard., embroidered work, 50cts.; Mrs. M. M. Homan, Augusta, embroidered slippers, &c., 50cts.; Mrs. George Warren, Farmington, worsted table cover, 75cts.; Miss A. M. Bartlett, Litchfield, toilet cushion, 25cts.; Miss M. Soper, Pittsford, lamp mat, 25cts.; Mrs. John Jewett, Pittsford, infant's skirt, 25cts.

HOUSEHOLD MANUFACTURES, REPAIRS, &c.

Mrs. Stephen March, Dresden, piece woolen carpeting, \$1.75; Mrs. J. M. Carpenter, Pittsford, piece all-wool mixed cloth, 50cts.; Mrs. M. Hamilton, Pittsford, best piece rag carpeting, \$1.25; Mrs. A. H. Clark, Pittsford, 21 best, 50cts.; Mrs. Calhoun Barker, Pittsford, (aged 77) piece cotton and wool cloth, 75cts.; Miss Hannah Keene, Chelsea, 3 pairs socks, (knit with left hand, the right being entirely useless) 50cts.; Mrs. A. Plummer, Gardiner, 3 lot stockings, 75cts.; Miss E. J. Randall, Gardiner, 2 pairs woolen stockings, 25cts.; Miss Ellen, both Brown Gardiner, (aged 8) 2 pairs stockings, 25cts.; Mrs. George Plaisard, Gardiner, pair black silk stockings, 50cts.; Mrs. B. W. Keene, Windsor, 3 pairs fringed woolen mittens, 75cts.; Mrs. P. Libby, Richmond, 15 skeins woolen yarn, 25cts.; Mrs. Eliza Pope, West Gardiner, piece linen, 50cts.; same, piece cotton and linen, 50cts.; Mrs. M. Hamilton, Pittsford, quilt, 25cts.; Mrs. N. K. Chaffin, Gardiner, white do, 50cts.; Mrs. Joshua Neal, Farmington, do, 25cts.; Mrs. B. W. Keene, Windsor, hearth rug, 25cts.; Miss Abby S. Swanton, Dresden, round braided mat, 25cts.; Miss Mary M. Pinkham, West Gardiner, 2 rugs, 25cts.; Miss M. T. Collins, Farmington, braided mat, 25cts.; Mrs. Ellen Mayo, Hallowell, rug, 50cts.; Mrs. J. W. Janssen, Windsor, rug, 50cts.; Mrs. Phoebe Henry, Gardiner, hunk rug, 25cts.; Mrs. E. Glazier, Jr., Hallowell, repairs on embroidered collar and cotton stockings, 25cts.; Mrs. Freeman White, Chelsea, hearth rug, 25cts.; Mrs. James Jewett, Gardiner, do, 25cts.; Mrs. Abigail Benson, Gardiner, 2 rugs, 75cts.

REPAIRS, &c.

Mrs. Gorman Whitney, Gardiner, bonnet, \$2.00.

JEWELRY AND MEDICAL INSTRUMENTS.

J. C. Hovey, Augusta, 2 necklaces, \$3.00; J. S. Lamberton, Gardiner, case silver watch and jewelry, \$3.00.

LEATHER AND MANUFACTURES OF SAME.

Stephen Neal, Pittsford, riding saddle, 10cts.; O. Parker, Augusta, chaise harness, \$2.00; buggy harness, \$2.50; side saddle, \$1.00; gent's saddle, \$1.00; fancy bridle, \$2.00; C. B. Atkins, Hallowell, 2 side-saddle leather, \$2.50; Cox & Clark, Gardiner, 3 pairs men's thick boots, \$1.00; John Webb, Gardiner, 5 pairs do, 50cts.

GARDEN AND FIELD VEGETABLES AND SEEDS.

Joseph Wharf, Litchfield, seed corn, \$1.00; Wm. Tarbox, Gardiner, do, 75cts.; Gardiner Spear, West Gardiner, do, 25cts.; A. Pitts, Gardiner, do, 25cts.; N. C. Gardner, Chelsea, do, 25cts.; Henry N. Parks, West Gardiner, California pumpkins, 25cts.; Wm. Peacock, W. Gardner, do, 25cts.; Joseph Williams, Gardiner, pop corn, 25cts.; Gilmore Bin, Dresden, seed wheat, 50cts.; Wm. Peacock, Gardiner, peck beans, 25cts.; John Tarbox, Gardiner, California pumpkins, 25cts.; Amos Bailey, W. Gardner, marrow do, 25cts.; W. M. Bradstreet, Gardiner, marrow do, 25cts.; Benj. Peacock, Gardiner, marrow squashes, 25cts.; F. A. Putnam, Jr., cabbages, 25cts.; Saml. Perkins, W. Gardner, do, 25cts.; Wm. Libby, Gardiner, Irish beets, 25cts.; E. H. Gardner, Gardiner, blood beets, 25cts.; J. M. Carpenter, Pittsford, do, 25cts.; Amos Bailey, W. Gardner, onions, 25cts.; Edward Peacock, West Gardiner, do, 25cts.; Amos Bailey, W. Gardner, beets and turnips, 25cts.; David True, Litchfield, pumpkins, 25cts.; E. H. Gardner, raisin buns, 25cts.; same, cowhens turnips, 25cts.; Wm. Peacock, W. Gardner, English turnips, 25cts.; Oliver Goodwin, Gardiner, Attingham do, 25cts.; A. Pitts, Gardiner, chicken seed, 25cts.; E. Glazier, Jr., Hallowell, egg, 25cts.; E. J. Ford, Gardiner, assortment of vegetables, 25cts.; same, seed sweet corn, 25cts.; Aaron Peacock, Gardiner, pumpkins and beets, grain, 25cts.; Samuel Austin, W. Gardner, squashes and onions, gratuity, 25cts.

INCIDENTALS.

Miss Susan Crawford (aged 10) "bean cottage," 50cts.; Miss Sarah E. Rice, Farmington, (aged 10) 3 loaves flour bread, and plate of cake, gratuity, \$1.00; D. P. Maynard, Augusta, box mould candles, 25cts.; Mrs. Charles Gay, Gardiner, molasses candy, 25cts.; Siskin & Page, Hallowell, leg poultry and box of whitening, 50cts.; Mrs. Elizabeth Lawrence, Pittsford, American flag, \$1.00.

DRAWING AND PAINTING.

Miss Margaret Allen, Gardiner, water colors, (Autumn leaves), 1st premium, \$1.50; Miss Brown, Hallowell, oil painting, 125; Miss S. W. Whitney, Gardiner, mono-chromatic drawing, 75cts.; Miss Martha Gardner, Gardiner, colored crayon drawing, 50cts.; Miss Eliza Moore, Gardiner, for colored crayon, 50cts.; Miss H. N. Lewis, Pittsford, for colored crayon, 50cts.; Miss Lucy A. Smiley, Gardiner, for two crayon pictures, 25cts.; Master P. H. Holmes, Gardiner, for colored crayon pictures and specimen in oriental painting, 50cts.; Miss F. Lewis, Pittsford, for best specimen oriental painting, 50cts.; Mrs. S. W. Blackford, Hallowell, for specimen in Grecian painting, 50cts.; Miss Anna F. Page, Hallowell, for Grecian painting, 50cts. There were also some paintings exhibited by Miss E. Robbins, Gardiner, Miss E. A. Robinson, Hallowell, and a specimen in oriental painting by Mrs. E. A. Moore, Gardiner; A. H. Beale, Gardiner, specimens Ambrotype, 1st premium; H. M. Green, Gardiner, do, 25cts.; Mr. D. M. Whitney, So. Gardiner, for pen and ink sketch, society's diploma.

F. A. BRYAN, JR.**MACHINE FOR BORING PUMPS AND TUBES.**

A Wyckoff, of Elmira, N. Y., has invented a Tubular Boring machine, for boring pumps and tubes. It consists of a hollow tube or auger having cut at its extreme end. Within the tube is a rod furnished with an auger-shaped screw. The cutters on the tube effect the boring, while the auger rod extracts the chips. The parts named move in different directions. The machine boro at the rate of ten feet per minute, and with an accuracy that is truly wonderful.

The great rule in relation to animals holds perfect in its application to vegetables; breed only from the best animals; defects and imperfections have always a tendency to propagate themselves, and are always in a greater or less degree transmitted.

MAINE STATE AG. SOCIETY.

AWARDS OF PREMIUMS.

On Crops.

Winter wheat, Samuel Gray, Harrison, 1st premium, \$8.00.

Spring wheat, Daniel Lancaster, Farmington, 1st premium, \$8.00; Philo Clark, Turner, 2d premium, 6.00.

Indian corn, Geo. P. Hooper, Paris, 1st premium, \$8.00; James Walker, Fryeburg, 2d premium, 6.00; A. & W. True, Litchfield, 3d premium, 4.00; George W. Freeman, West Bridgton, 4th premium, book.

Barley, S. N. Watson, Fayette, 1st premium, \$8.00; Daniel Lancaster, Farmington, 2d premium, 5.00; Charles O. Kilburn, Bridgton, 3d premium, book.

Rye, the committee consider the crop of winter rye, entered by Benj. Morse, of New Gloucester, raised on new burnt land, as not coming under the head of experiment, as contemplated by the Society, who offer premium for "experiment," having reference to cultivation of soil, kind of manure, etc.—but they recommend to him a gratuity of \$4.00; and for similar reasons, they recommend to Charles O. Kilburn, Bridgton, for his crop of rye on a burn, a gratuity of \$3.00.

Oats, Daniel Lancaster, 1st premium, 5.00; Charles O. Kilburn, 2d premium, 4.00.

Field Beans, James Robinson, Durham, 3.00.

The committee further state, that an entry and statement, of S. N. Watson of Fayette, who competes for the premium on Forage, was found among their files; but considering that this subject was not properly before them, they return it to the Secretary, that it may be put into the proper hands for examination.

THE FINE ART OF FATCHING.

To patch—how vulgar is the term! Yet it is an operation requiring far more skill than does the making of a new garment, and when well executed, may save the purchase of many a costly one; the most expensive robe may, by accident, be torn or spotted, the first day of its wear; the piece inserted in lieu of the damaged one is a patch. If a figured material, the pattern has to be exactly matched; in all cases the insertion has to be made without a pucker, and the kind of seam to do such as, though strong, will be least apparent, the corners must be turned with neatness. Is not this an act which requires teaching? So of darning, much instruction is necessary, as to the number of threads to be left by the needle, according to the kind of fabric; then there is the kind of thread or yarn most suitable, which requires experience to determine; when the article is coarse, the chief attention is directed to expedition, but a costly article of embroidery on a muslin, can only be darned with ravelings of a similar muslin; such particulars do not come to the girl by inspiration—they must be taught, or be left to be acquired by dearly-bought experience.

The third mode of repair is well understood and practiced by our Continental neighbors, tho' rarely in this country. The stocking stitch is neither more tedious nor difficult than the darn; yet how many pairs of stockings are lost for want of knowing it, when a hole happens to be above shoe! Practice in lace stitches is more desirable, particularly for repairing lace of the most costly descriptions. The deficiency of a single loop, when lace is sent to be washed, often becomes a large hole under the operation, and thus the beauty of the lace is destroyed. Indeed, lace when duly mended, upon the appearance of even the smallest crack, may, with little trouble, be made to last twice or thrice its usual term of duration. So, the shawl stitch is never taught in this country, though by employing it with ravelings from the shawl itself, the most costly cashmere can be repaired, without the possibility of discovering the inserted part.

Proficiency in such useful works, might well merit as much approbation as is now bestowed upon crocheted or other fancy works, and might be considered as equally desirable qualifications, in a tradesman's goodness, as music. In popular places, it might well answer to establish schools, where the art of mending apparel, should be the chief object of instruction; a month or two spent in it, would be sufficient for the darning, already a good plain needle-worker. It must further be observed, that without a practical knowledge of needle-work, no young lady can judge whether her seamstress has, or has not, done a reasonable quantity of work, in a given time; and if this be true as to the plain seam, it is still more essential in regard to mending of all kinds. [Exchange.]

